

REMARKS

In the February 20, 2009 Office Action, all of the claims stand rejected in view of prior art. No other objections or rejections were made in the Office Action.

Status of Claims and Amendments

In response to the February 20, 2009 Office Action, Applicant has amended the claims 1, 4 and 8, and introduced new dependent claims 11-12, as indicated above. Thus, claims 1-4, 8-9 and 11-12 are pending, with claims 1 and 8 being the only independent claims. Reexamination and reconsideration of the pending claims are respectfully requested in view of above amendments and the following comments.

Interview Summary

On May 20, 2009, the undersigned conducted a telephonic Interview with Examiner Shah, who is in charge of the above-identified patent application. Applicant wishes to thank Examiner Shah for the opportunity to discuss the above-identified patent application during the telephonic Interview of May 20, 2009.

During the May 20, 2009 telephonic Interview, the undersigned discussed proposed claim amendments similar to the claim amendments introduced above. Applicant pointed out that the cited prior art does not appear to disclose a synchronization adjustment unit that ***controls the frequency of a cycle start packet output from a cycle master, and links the frequency of the cycle start packet with the frequency of the reference signal.***

In response, Examiner Shah indicated that U.S. Patent No. 6,895,009 to Stallkamp (herein after the "Stallkamp patent") appears to disclose the claimed invention at column 3, lines 20-40 where the cycle master in a node "maintains a clock signal common to all nodes connected to the isochronous network 104". In other words, Examiner Shah appears to be

alleging that the node (the master 106) of the Stallkamp patent serving as the cycle master also serves as *a synchronization adjustment unit*.

Examiner Shah also indicated that if claims were amended to require that the cycle master and the synchronization adjustment unit be located in different nodes, then the claims might be allowable over the currently cited prior art (for example, the Stallkamp patent).

Entry of December 30, 2008 RCE

In paragraph 1 of the Office Action, the Office Action indicates that Applicant's December 30, 2008 Request for Continued Examination (RCE) and corresponding submission has been entered.

Rejections - 35 U.S.C. § 103

In paragraph 2 of the Office Action, claims 1-4, 8 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Stallkamp patent in view of U.S. Patent Publication No. 2003/0114679 (hereinafter "the Domon publication"). In response, Applicants have amended independent claims 1 and 8, as mentioned above. Support for the amendments to claims 1 and 8 can be found in the specification as originally filed at page 3 line 26, through page 4, line 9, page 6 lines 16-26, page 7, lines 24-29, the first paragraph on page 9 and the first paragraph on page 10 of the specification as originally filed.

The Office Action alleges that the Stallkamp patent discloses "a synchronization adjustment unit for controlling the frequency of the cycle start packet output from the cycle master linking with the frequency of the reference signal received by the external synchronizing signal receiver" (hereinafter "synchronization adjustment unit") on page 4 line 23 - page 5 line 3 of the) Office Action.

Applicant respectfully asserts that the cited prior art has been mis-interpreted and mis-applied. The above finding in the Office Action is not supported by the disclosure of the cited prior art. Specifically, the Stallkamp patent neither discloses nor suggests the claimed features of the synchronization adjustment unit.

Applicant has amended the wording of the requirements of the recited synchronization adjustment unit to make the features of synchronization adjustment unit clearer.

Specifically, amended claims 1 and 8 now both clearly recite that the synchronization adjustment unit is required to *control the frequency of a cycle start packet output from a cycle master*, and *link the frequency of the cycle start packet with the frequency of the reference signal*.

The cited prior art neither discloses nor suggests a synchronization adjustment unit that *controls the frequency of a cycle start packet output from a cycle master* and *links the frequency of the cycle start packet with the frequency of the reference signal*.

The Office Action states that synchronizer 254 in FIG. 2 of the Stallkamp patent synchronizes the operating frequencies of AV devices and enables data based in one time domain to be transmitted over *an isochronous bus of a second time domain* (see the Stallkamp patent at column 5, lines 10-20). This teaching means that the operating frequencies of AV devices are synchronized over *an isochronous bus* having a second time domain. However, Applicant respectfully asserts that the Stallkamp patent fails to disclose or suggest *controlling the frequency of a cycle start packet output from a cycle master*. More specifically, there is no disclosure relating to controlling the frequency of the cycle start packet output from the cycle master in FIG. 2 of the Stallkamp patent or in any other part of the disclosure of the Stallkamp patent.

The claimed invention requires that the synchronization adjustment unit *control the frequency of a cycle start packet output from a cycle master* and *link the frequency of the cycle start packet with the frequency of the reference signal*. Neither of these two requirements of the claimed invention are disclosed or suggested by Stallkamp patent.

During the May 20, 2009 telephonic Interview, Examiner Shah alleged that the cycle master of the Stallkamp patent does control the cycle start signals. Examiner Shah specifically cited the paragraph in the Stallkamp patent at column 3, lines 20-42, to support his position. However, Applicant notes that this paragraph of the Stallkamp patent specifically states that the cycle master is for an isochronous network (see column 3, lines 26-27).

According to Stallkamp Publication, the frequency of the cycle start packet output from the cycle master 106 in FIG. 1 is NOT controlled by a separate synchronization adjustment unit and is *not* linked with the frequency of a house reference signal 255 (see column 5 lines 10-20). Rather, the Stallkamp patent discloses only isochronous data transmission (see column 2 lines 34-35). The isochronous data transmission uses a substantially constant frequency (8kHz +/-100ppm). Thus, in the isochronous data transmission of the Stallkamp patent, the frequency of the cycle start packet output from the cycle master 106 in FIG. 1 *cannot* be controlled *and* linked with the frequency of a house reference signal 255, but rather is always a constant frequency that is common to all nodes.

In other words, the Stallkamp patent discloses *control* of cycle start signals, but does not *control the frequency of the cycle start signals*. More specifically, the Stallkamp patent requires that the cycle “master 106 maintains a clock signal common to all nodes connected to the isochronous network 104” (see column 3, lines 24-26). In other words, the Stallkamp is synchronizing communications between the nodes, but does not teach *controlling the frequency of a cycle start packet output from a cycle master*.

The Domon Publication also fails to neither disclose nor suggest the claimed features of the synchronization adjustment unit. In the outstanding Office Action, the rejection states as follows:

The first node or a second node of the plurality of nodes comprises a data conversion unit for converting the data and outputting the converted data (the digital video player 220 decodes the DV format data and outputs an analog video signal, Demon page 6, paragraph 0098, lines 6-8) in synchronism with the reference signal (on page 5 line 20 - page 6 line 2 of the office action).

At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Stallkamp and Demon before him or her, to enhance the communication and conversion methods of Domon with the synchronization with the house reference signal of Stallkamp (on page 6 lines 6 -9 of the office action)

However this conclusion in the Office Action is based on the above described mis-interpretation and mis-application of the Stallkamp patent. The claimed "a data conversion unit" converts the data and outputs the converted data *in synchronism with the reference signal*. The frequency of *the reference signal is linked with* the frequency of the cycle start packet output from the cycle master, as required in independent claims 1 and 8. These features of the claimed invention provide a different work/effect from that of Stallkamp or Domon Publication. This work/effect is for example, described in the present specification as follows;

[0016] With this configuration, by synchronization of the cycle start packet frequency with the reference signal, the transfer rate of the data output from the first node can be matched to the output rate of the second data from the second node, thereby preventing the occurrence of dropped frames or repeated frames or the like in the output second data. In particular, when a video signal in DV format is converted into a video signal in a different format, the occurrence of any image defect such as dropped frames or repeated frame or the like can be prevented.

It would NOT have been obvious to one ordinary skill in the art, having the teachings of Stallkamp and Demon before him or her, to enhance the communication and conversion methods of Domon with the synchronization with the house reference signal of Stallkamp.

Under U.S. patent law, the mere fact that the prior art can be modified does *not* make the modification obvious, unless an *apparent reason* exists based on evidence in the record or scientific reasoning for one of ordinary skill in the art to make the modification. See, KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1741 (2007). The KSR Court noted that obviousness cannot be proven merely by showing that the elements of a claimed device were known in the prior art; it must be shown that those of ordinary skill in the art would have had some "apparent reason to combine the known elements in the fashion claimed." Id. at 1741. The current record lacks any apparent reason, suggestion or expectation of success for combining the patents to create Applicants' unique arrangement of a data conversion system.

More specifically, if the Stallkamp patent and/or the Domon publication were somehow modified to meet the claims of the present invention, it would require a complete reconstruction of the logic and controls of the Stallkamp patent and/or the Domon publication, which would destroy the teaching of the Stallkamp patent and the Domon publication. Further, the method of generating time stamps for isochronous data taught in the Stallkamp patent teach against the claimed invention, since the claimed invention requires synchronization with a reference signal.

Moreover, Applicant believes that the dependent 2-4 and 9 are also allowable over the prior art of record in that they depend from independent claims 1 and 8, and therefore are allowable for the reasons stated above. Also, the dependent claims 2-4 and 9 are further allowable because they include additional limitations. Thus, Applicant believes that since the prior art of record does not disclose or suggest the invention as set forth in independent

claims 1 and 8, the prior art of record also fails to disclose or suggest the inventions as set forth in the dependent claims.

Therefore, Applicant respectfully requests that this rejection be withdrawn in view of the above comments and amendments.

New Dependent Claims 11 and 12

Applicant has added new dependent claims 11 and 12 by the current Amendment. Claims 11 and 12 further require that the synchronization adjustment unit controls the frequency of the cycle start packet output from the cycle master and is located at a first node and the cycle master is located at a second node in communication with the first node.

Prior Art Citation

In the Office Action, additional prior art references were made of record. Applicant believes that these references do not render the claimed invention obvious.

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In view of the foregoing amendment and comments, Applicant respectfully asserts that claims 1-4 and 8-9 are now in condition for allowance. Reexamination and reconsideration of the pending claims are respectfully requested.

Respectfully submitted,

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